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March 7, 2005

Ms. Lenka Berlin
3 WP12
US EPA, Region III
1650 Arch Street
Philadelphia, PA 19103

Dear Ms. Lenka:

The following comments on the Bacteria and Sediment TMDL for Christina River Basin, Pennsylvania, Delaware, and Maryland are submitted by the Mid-Atlantic Environmental Law Center ("Commentors").

REGULATORY BACKGROUND

The TMDL program of the Clean Water Act (CWA) section 303(d) sets forth a clear process that all states must follow when compliance with standards has not been achieved for all waters. In short, each state must (1) identify all of its impaired waters, the current effluent limitation for which are "not stringent enough to implement water quality standards" ("WQS") and (2) for each identified water, establish daily pollutant load limits-TMDLs-of each pollutant contributing to the impairment. 33 U.S.C. § 1313(d). TMDLs are to be calculated at a level that will ensure attainment of water quality standards and are to be implemented by allocating the loads among the water's point sources and non-point sources of pollution. Id.; 40 C.F.R. §§ 130.2(g), (h), (i), 130.7.

MID-ATLANTIC ENVIRONMENTAL LAW CENTER

MAELC is a not-for-profit environmental law firm that provides legal services to public interest organizations in environmental matters, such as submitting comments to agencies. MAELC's mission is to restore and protect the environment by providing superior legal services to help resolve environmental challenges in the Mid-Atlantic United States, including Maryland. MAELC aims to ensure that environmental requirements are met, and the legislation and regulations are adequately implemented by the responsible federal, state, and local agencies. MAELC is keenly interested in TMDLs, having successfully obtained several consent decrees requiring the development of TMDLs consistent with the Clean Water Act.

GENERAL COMMENT

The purpose of establishing TMDLs is to ensure that the water quality standards in the water body can be met after implementation of the TMDL. To ensure that the water quality standards are met a conservative approach to all aspects of the TMDL, including waste load allocations ("WLA"), load allocations ("LA"), and margin of safety ("MOS") must be utilized.

COMMENTS

- The proposed TMDL does not include any potential for growth in the community. The introduction states, "[p]arts of the watershed are heavily impacted by urbanization" but the TMDL does not include growth in the calculations. For example, the septic system data for Delaware is from 1990 to 2000 and is "assumed to be constant." The livestock inventory is two years old; this assumes that there have been no births or deaths of livestock since 2002. The TMDL is inadequate because it does not account for future growth in the community.

- The TMDL Methodology and Calculation used old data to determine the bacteria TMDLs for Delaware. Three models were used to determine bacteria TMDLs for the Christina River: the HSPF watershed loading model, the XP-SWMM CSO discharge model, and the EFDC receiving water model. Two of the three models were calibrated using the same 4-year simulation period, October 1, 1994 to October 1, 1998. All three models used this same time period to determine the baseline and allocation loads. As a practical matter, an effective TMDL would include recent data and not include calculations that are almost 10 years old.

- The TMDL Methodology and Calculation used old data to determine the bacteria TMDLs for Pennsylvania. The HSPF loading model used a 4-year simulation period, October 1, 1994 to October 1, 1998 to determine the baseline and allocation loads. As a practical matter, an effective TMDL would include recent data and not include calculations that are almost 10 years old. This same model was used to determine sediment levels for the reference sheds.

- The septic system bacteria load estimates are based on old census data. Additionally, while there was limited information used about Chester County septic system repair permits there was no information on repair permits in New Castle County.

- Combined Sewer Overflow (CSO) bacterial loads were determined by using flow rates calculated during two storm events in 2003. Bacterial loads from CSO's should have been determined using more storm events over a wider range of time.

- Most of the data and calculations relied on for the TMDL is old with dates ranging from 1994 to 2000. The information relied on for land use distribution is dated May 1998 and the information on impairments and sources of impairments is dated August 1998.

- The discharge information regarding the NPDES permit holders is dated and/or incomplete. Discharge information for ten NPDES permit holders is dated 1995/1998 while the discharge information for one permit holder is only an estimate.

- None of the NPDES permitted dischargers were required to reduce their present NPDES permit limits for fecal coliform bacteria or enterococcus bacteria. Presumably, this would leave the reduction to the non-point sources for which the load allocations are "best estimates" or "reasonably accurate estimates" and the MS4 townships. Non-point sources are the most difficult to regulate and there is no explanation of how the EPA intends to monitor or regulate them to reduce the discharge of fecal coliform bacteria and enterococcus bacteria. Thus, this TMDL fails to meet the regulatory definition of a TMDL.

- The TMDL contains very little information from Maryland thus the proposed TMDL is not a true representation of the effected States or the pollution in the Christina River.

- The proposed TMDL fails to breakdown the non-point sources into some cognizable category of source such as urban runoff, etc. Failure to allocate specific loads to each non-point source or non-point source category contravenes the CWA and makes it impossible to set implementation goals. The Commentors recommend that EPA include individual or category load allocations in the Proposed TMDLs. Additionally, there are no definitive load allocations for the non-point sources. Thus, this TMDL fails to meet the regulatory definition of a TMDL.

- The use of an explicit MOS set at 5% may or may not be adequate to account for the uncertainty about the relationship between bacteria and sediment loading and the water quality of the Christina River. The TMDL should justify why an explicit MOS of 5% is adequate to account for the uncertainty of the relationship between bacteria and sediment loading on the water quality of Christina River. Additionally, the 5% MOS is inadequate because it does not take into account factors such as the dated material relied upon for the calculations, the lack of calculations for potential growth in the community and the failure to include load allocation calculations for non-point sources.

- The Proposed TMDL contravenes the Clean Water Act by failing to establish a total maximum *daily* load. It establishes only seasonal and annual limits. Setting seasonal and annual limits, which presumably allows for daily fluctuations in loads as long as the seasonal and annual limits are not exceeded does not adequately protect water quality on a *daily* basis. The Clean Water Act specifically requires that a total maximum *daily* load be established for impaired waterways. Congress clearly intended that water quality standards be met *every day*, not just most days.

- It is not sufficient that the stormwater allocations are expressed in a "gross allotment." The definition of a WLA under the regulations requires a wasteload allocation to be the portion of receiving water's loading capacity that is allocated to one of its existing or future point sources of pollution.

The Commentors appreciate the opportunity to provide these comments for your review. EPA was diligent in proposing this TMDL. Commentors found the TMDL to be well organized and easy to follow. Also, Commentors appreciated the opportunity to attend a public hearing and to ask questions of EPA officials. Please contact me if you should have any questions regarding this submission.

Very truly yours,

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